Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-14 (Canceled)

15. (Previously Presented) A chemical process for recycling PET wastes, the process comprising the stages of: a) a saponification reaction stage, wherein PET waste particles are reacted with stoichiometric or excessive amounts of a strong base metal in a water immiscible alcoholic reaction media, where the reaction is brought to the boiling temperature of the alcoholic reaction media and at atmospheric pressure, thereby obtaining as reaction products a salt of terephthalic acid with base metal and ethylene glycol, the latter being incorporated to the alcoholic reaction media; b) a separation stage of such terephthalic acid salt from the alcoholic reaction media comprising the steps of: i) cooling the reaction mixture to a temperature below 90°C; ii) adding sufficient water to the reaction media in order to dissolve the terephthalic acid salt, thereby obtaining two phases, namely an aqueous phase where the terephthalic acid salt is dissolved, and an organic phase that consists of the alcoholic reaction media in which ethylene glycol is incorporated; and iii) a liquid-liquid separation phase, wherein the aqueous phase containing the terephthalic acid is separated from the organic phase; c) a terephthalic acid formation stage, wherein from terephthalic acid salt of stage (b) terephthalic acid is obtained, reacting said salt with a stronger acid than terephthalic acid to form and precipitate the latter as crystals; d) a solid-liquid

separation stage, wherein precipitated terephthalic acid in stage (c) is separated from the media where it was crystallized; and e) an ethylene glycol recovery stage, wherein ethylene glycol and the alcoholic reaction media are separated and recovered from the reaction media separated in stage (b).

16. (Previously Presented) The chemical process for recycling PET wastes of claim 15, wherein the alcoholic reaction media is comprised of a monohydric alcohol selected from alcohols with 4 to 8, primary, secondary or tertiary, lineal or branched carbon atoms or a mixture thereof.

17. (Previously Presented) The chemical process for recycling PET wastes of claim 15, wherein the PET waste particles are obtained from any source such as used beverage bottles and packages, and in any known shape, i.e. as fiber, film and the like.

18. (Currently Amended) The chemical process for recycling PET wastes of claim 15, wherein the base employed in the saponification reaction stage is selected from the group consisting in ~~alkal~~ alkali metal hydroxides or alkaline-earth metal hydroxides.

19. (Previously Presented) The chemical process for recycling PET wastes of claim 18, wherein the base employed is sodium hydroxide (NaOH) or potassium hydroxide (KOH).

20. (Previously Presented) The chemical process for recycling PET wastes of claim 15, wherein in stage (c) of terephthalic acid formation, sulfuric acid concentrate or hydrochloric acid is employed until an acid pH is achieved in the media where this reaction takes place, thereby precipitating terephthalic acid crystals.

21. (Previously Presented) The chemical process for recycling PET wastes of claim 15, wherein in stage (d) of solid-liquid separation, terephthalic acid crystals are separated from the media where they were crystallized through a filtering process and then washed and purified.

22. (Previously Presented) The chemical process for recycling PET wastes of claim 15, wherein in stage (e) of ethylene glycol recovery, the alcoholic reaction media where ethylene glycol is incorporated undergoes a distillation process, thereby separating and recovering ethylene glycol from the alcoholic reaction media.